of a light chain of the monoclonal antibody that binds the antigen specifically

bound by monoclonal antibody 8H9 <u>wherein the variable region of a heavy chain</u>

<u>of a monoclonal antibody that binds the antigen specifically bound by monoclonal</u>

<u>antibody 8H9 and the variable region of a light chain of the monoclonal antibody</u>

<u>that binds the antigen specifically bound by monoclonal antibody 8H9 are</u>

<u>covalently linked by disulfide bonds</u>; and

      b) an effector molecule comprising a toxin;

      wherein the Fv protein specifically binds the epitope bound by monoclonal

antibody 8H9.

Claim 2 (original): The isolated Fv protein of claim 1, wherein said effector molecule

comprises ricin A, abrin, diphtheria toxin or a subunit thereof, *Pseudomonas* exotoxin or a

portion thereof, saporin, restrictocin or gelonin.

Claim 3 (original): The isolated Fv protein of claim 2, wherein said effector molecule is

selected from the group consisting of PE38, PE40, PE38KDEL, and PE38REDL.

Claim 4 (original): The isolated Fv protein of claim 1, wherein the variable region of the

heavy chain comprises an amino acid sequence set forth as SEQ ID NO: 7, and wherein the

variable region of the light chain comprises an amino acid sequence set forth as SEQ ID NO: 8.

Claim 5 (canceled).

Claim 6 (original): The isolated Fv protein of claim 1, wherein the variable region of the

heavy chain comprises

      a heavy chain framework region comprising a complementarity determining region

HCDR1, a HCDR2, and a HCDR3, wherein the (HCDR)-1 comprises an amino sequence

NYDIN (amino acids 31-35 of SEQ ID NO: 3) the HCDR2 comprising an amino acid sequence

WIFPGDGSTQY (amino acids 50-60 of SEQ ID NO: 3), the HCDR3 comprises an amino acid

sequence QTTATWFAY (amino acids 99-107 of SEQ ID NO: 3).

Claim 7 (original): The isolated Fv protein of claim 1, wherein the variable region of the light chain comprises

a light chain framework region comprising a complementarity determining region (LCDR)1, a LCDR2, and a LCDR3, wherein the LCDR1 comprises an amino acid sequence RASQSISDYLH (amino acids 157-167 of SEQ ID NO: 3), the LCDR2 comprises an amino acid sequence YASQSIS (amino acids 183-189 of SEQ ID NO: 3), and the LCDR3 comprises an amino acid sequence QNGHSFPLT (amino acids 222-230 of SEQ ID NO: 3).

Claim 8 (original): The isolated Fv protein of claim 6, wherein the heavy chain framework and the light chain framework are human.

Claim 9 (canceled).

Claim 10 (original): The isolated Fv protein of claim 9, wherein the toxin is covalently linked to the variable region of the heavy chain.

Claim 11 (original): The isolated Fv protein of claim 10, wherein the toxin comprises a *Pseudomonas* exotoxin.

Claim 12 (original): The isolated Fv protein of claim 11, wherein the *Pseudomonas* exotoxin is PE38.

Claim 13 (original): The Fv of claim 1, wherein said Fv polypeptide comprises an amino acid sequence set forth as SEQ ID NO: 7 and an amino acid sequence set forth as SEQ ID NO: 8.

Claims 14-20 (canceled).

Claim 21 (original): A pharmaceutical composition comprising a therapeutically effective amount of the isolated Fv protein of claim 1 sufficient to inhibit tumor cell growth, and a pharmaceutically acceptable carrier.

Claim 22 (original): The composition of claim 21, wherein said effector molecule is a Pseudomonas exotoxin.

Claim 23 (original): The composition of claim 21, wherein the Pseudomonas exotoxin molecule comprises PE38, PE40, PE38KDEL or PE38REDL.

Claim 24 (original): A method for killing a tumor cell, comprising contacting the cell with an effective amount of the isolated Fv protein of claim 1, thereby killing the cell.

Claim 25 (original): The method of claim 24, wherein the cell is in vitro.

Claim 26 (original): The method of claim 24, wherein the cell is in vivo.

Claim 27 (original): The method of claim 24, wherein the Fv protein comprises
an effector molecule comprising ricin A, abrin, diphtheria toxin or a subunit thereof, *Pseudomonas* exotoxin or a portion thereof, saporin, restrictocin or gelonin.

Claim 28 (original): The method of claim 27, wherein the effector molecule comprises a *Pseudomonas* exotoxin.

Claim 29 (original): The method of claim 28, wherein the *Pseudomonas* exotoxin comprises PE35, PE37, PE38 or PE40.

Claim 30 (original): The method of claim 29, wherein the *Pseudomonas* exotoxin is PE38.

Claim 31 (original): The method of claim 24, wherein the cell is a breast cancer cell, an osteosarcoma cell, or a neuroblastoma cell.

Claim 32 (original): A method for treating a tumor in a subject, comprising administering to the subject a therapeutically effective amount of the Fv protein of claim 1, thereby treating the tumor.

Claim 33 (original): The method of claim 32, wherein the tumor is a breast cancer, an osteosarcoma, or a neuroblastoma.

Claims 34-38 (canceled).